



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,965	02/04/2004	Kazuhiko Gogo	14470.22US01	5309

23552 7590 06/24/2005

MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

SY, MARIANO ONG

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,965

Applicant(s)

GOGO, KAZUHIKO

Examiner

Mariano Sy

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 4 is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on May 23, 2005 has been received.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weiler et al. (DE 10131324 A1) in view of Karasudani (US 4,161,239).

Re-claim 1 Weiler et al. disclosed, as shown in fig. 1a-1d, a disk brake unit comprising at least one piston 20 built into a caliper body 14 having a substantially U-shaped cross section with an outer section and an inner section connected by a bridge section 23, an outer pad 11 attached to the outer section, an inner pad 10 attached to the inner section, and an outer periphery of a brake disk 7 inserted between the outer pad and inner pad wherein on actuation of said piston, said outer pad and inner pad press said brake disk, wherein part of the bridge section projects further inwards than an outer peripheral edge of the piston and the projecting part of the bridge section extends from the inner section to the outer section of the caliper body (see fig. 1a).

However Weiler et al. failed to disclose wherein part of the piston projects beyond an outer peripheral edge of the brake disk to an outer side, the outer pad and inner pad do not project out further than the outer peripheral edge of the brake disk.

Karasudani teaches, as shown in fig. 3, a disk brake wherein part of the piston 4 projects beyond an outer peripheral edge of the brake disk to an outer side, the outer and inner pads 3,3 do not project out further than the outer peripheral edge of the brake disk.

It would have been obvious to one of ordinary skill in the art to have modified the pistons to project beyond an outer peripheral edge of the brake disk to an outer side, and the outer and inner pads do not project out further than the outer peripheral edge of the brake disk into the disk brake unit of Weiler et al., in view of the teaching of Karasudani, is a matter of design choice depending upon the size, capacity, and application of the disk brake unit.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weiler et al. in view of Karasudani as applied to claim 1 above, and further in view of Reeves (US 6,478,121).

Re-claim 3 Weiler et al. as modified failed to disclose wherein there are a plurality of pistons, the plurality of pistons being lined up along the outer peripheral edge of the brake disk at specified intervals.

Reeves teaches, as shown in fig. 4-9, a disc brake caliper having plurality of pistons, the plurality of pistons being lined up along the outer peripheral edge of the brake disk at specified intervals, see col. 4, lines 6-13.

It is old and well known in the art for a brake caliper having a plurality of pistons and it would have been obvious to one of ordinary skill in the art to that modify the

Art Unit: 3683

caliper of Weiler et al. with a plurality of pistons, in view of the teaching of Reeves, in order to decrease the size of the caliper by having smaller pistons instead of one single large piston.

5. Claims 2 and 4 are allowed.

6. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3683

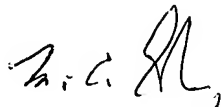
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 571-272-7126. The examiner can normally be reached on Mon.-Fri. from 8:30 A.M. to 2:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci, can be reached on 571-272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 M. Sy

June 14, 2005


6/14/2005
MATTHEW C. GRAHAM
PRIMARY EXAMINER
GROUP 310